Chemistry Unit
Case Assignment and Evidence Handling Procedures

1 Purpose

This document supplements the practices set forth in the *FBI Laboratory Quality Assurance Manual* and the *FBI Laboratory Operations Manual* by incorporating Chemistry Unit (CU) specific information and requirements.

2 Scope

These procedures apply to CU personnel conducting case assignments and handling evidence.

3 Procedures

3.1 Case Assignments

The assignment of cases to CU examiners is the responsibility of the applicable Technical Leader (TL) or Supervisor. When a case is assigned to an examiner, the following steps are taken:

- The request is reviewed to determine which CU discipline(s) and/or category(ies) of testing is/are involved.
- If a new examiner assignment is required, the applicable TL or Supervisor will ensure the assignment is made to the applicable Case Record in Forensic Advantage (FA). For Legacy cases, the appropriate Evidence Management Unit personnel will be notified of the examiner assignment.

3.2 Evidence Inventory

For a Single Unit Submission (SUS), refer to the *FBI Laboratory Practices for Processing a Single Unit Submission (SUS).*

After a case is assigned and the evidence is delivered to the CU, the evidence container(s) and/or packaging will be opened and the contents inventoried. The *CU Evidence Check-In Sheet* (Appendix A) or the FBI Laboratory Evidence Check-In Notes (generated in FA) will be used for recording the inventory. The evidence listing section of the *CU Evidence Check-In Sheet* is optional.

A *CU Evidence Check-In Sheet* is not required when the evidence management personnel's check-in notes adequately describe the details of the received evidence, so long as the applicable

examiner or technician records that the check-in notes adequately described the evidence as received. If minor edits to the evidence management personnel's check-in notes are necessary, the edits can be made by hand on a printed version of the FBI Laboratory Evidence Check-In Notes.

The *CU Abbreviations List* (Appendix B) contains a list of abbreviations that are not expected to be readily recognized within the field of chemistry, or in general everyday usage. Any other abbreviations that are not expected to be readily recognized need to be defined upon first use within each case file. Abbreviations that are expected to be readily recognized may be used without defining them.

When opening evidence container(s) and/or packaging, CU personnel should keep in mind there may be unsealed items of evidence present. If loose items are found, CU personnel will collect and identify the evidence per FBI Laboratory practices.

3.2.1 Contributor Contact

After inventory and preliminary assessment of the evidence in CU, someone from CU (typically the assigned examiner) will contact the contributor. This communication will be recorded on the Case Communication Log in FA. The contact will allow for communication of matters such as: case investigative needs; time constraints, such as trial dates; clarification on what is forensically feasible and probative; whether additional evidence, such as known samples or reference samples, is required; prioritization of the items to be analyzed; a reasonable estimate of the completion date for the applicable CU examinations; and/or whether the examination(s) is still needed.

This communication is not required for TEDAC cases. For SUS cases, this communication may be combined with the acknowledgement communication if the evidence was inventoried within 10 calendar days of receipt in CU.

3.3 Processing and Preservation of Evidence

The processing area and utensils will be appropriately cleaned prior to introducing evidence.

CU caseworking personnel will at all times be aware of the need to protect the evidence for examinations that are to be conducted by other caseworking units, and preserve it from loss, contamination, and deleterious change. These individuals, through their training and by referencing the *Examination Plan*, will be knowledgeable of the order in which examinations need to be conducted. Listed below are general guidelines for evidence preservation. If there are any questions, or if unusual circumstances arise, consult with the other units assigned to the case.

- Perishable Evidence: Perishable evidence (e.g., biological specimens, food items) will be refrigerated or frozen.

- Trace Evidence: Evidence to be examined by the Trace Evidence Unit (TEU) will be opened and scraped by TEU before other examinations are conducted, unless directed otherwise.
- Firearms: CU caseworking personnel should request assistance of personnel in the Firearms/Toolmarks Unit to render firearms safe as necessary.
- Drug Residue: Evidence involving suspected drug residue will be opened and processed by appropriate CU personnel before other examinations are conducted.
- Ignitable Liquids: Evidence involving suspected ignitable liquids will be opened and processed by appropriate personnel before other examinations are conducted.
- Documents: If indented writing examinations are to be conducted, CU caseworking personnel will protect the evidence from any action that might transfer impressions onto the evidence, including the use of initials to place the evidence under proper seal.
- Latent Fingerprints: CU caseworking personnel will preserve latent fingerprint evidence by wearing nitrile or cotton gloves when handling the evidence. Cotton gloves absorb moisture and should not be used to handle latent evidence with non-porous surfaces. Further, examinations that may obliterate possible latent fingerprints should be limited until the fingerprint examinations are completed. If possible, avoid refrigerating latent fingerprint evidence.
- DNA Evidence: Evidence to be examined for DNA should be handled carefully to prevent addition and/or loss of DNA. The use of appropriate personal protective equipment (e.g., lab coat, gloves, mask) minimizes the chance of transferring DNA to the evidence.

3.3.1 Autosampler Verification

When an autosampler is used, a sequence log containing the file name, autosampler position, and sample identification will be printed, or otherwise retained. For instruments that do not have the ability to print a sequence log, or in other situations when a sequence log cannot be obtained, the *CU Autosampler Verification Log* (Appendix C) will be completed and retained. The sequence log or *CU Autosampler Verification Log* will be completed by the instrument operator and will be initialed by the operator to indicate that the sequence was checked against the sample position(s) to ensure the two are in agreement.

3.3.2 Secondary Evidence

Secondary evidence is material derived from an examination process on an item of evidence (e.g., prepared microscope slides, pill boxes containing debris, vials containing extracts). If sufficient original evidence remains after the examination process such that the process could readily be repeated, then the material is not required to be retained as secondary evidence.

Secondary evidence is recorded on the *CU Secondary Evidence Log* (Appendix D). Refer to the LOM for further information on secondary evidence (transfer, records, etc.).

3.4 Evidence Seal and Storage

Refer to the *FBI Laboratory Quality Assurance Manual* and *FBI Laboratory Operations Manual* for evidence seal and storage requirements; the below sections address CU specifics.

Other than the below exceptions, evidence will be stored in an Evidence Storage Room (ESR) Redacted) at the end of each day. When evidence is stored in a location other than an individually assigned locker within an ESR, each transfer to-and-from the storage location (e.g., cage, refrigerator, shelf) will be recorded in FA, or on a *Chain-of-Custody Log* for Legacy cases.

Evidence that is not transferred to an ESR at the end of the day will be secured by placing an "Evidence Do Not Disturb" sign (or similar) on top or in front of the evidence and locking the door to the room (where possible). This practice is limited to evidence that is too large and/or bulky to transfer, or evidence that is being processed in a manner that prohibits transfer (e.g., mounted in equipment). Transfer of the evidence to the non-ESR storage location will be recorded at the end of each day it was examined.

3.4.1 Active Examination

Evidence is considered to be under active examination when it is in the process of being inventoried or examined in the CU. If a period of ten business days elapses since the last time the evidence was inventoried or examined, then the evidence will be considered 'not under active examination' at that point.

3.4.2 Evidence Seal- Boxes With Zip Tie Style Closures

Evidence will be sealed according to the LOM. One additional option is the use of boxes with zip tie style closures. These boxes will be considered properly sealed when zip ties are applied to both ends of the box and each zip tie is initialed by the individual sealing the box.

3.5 Repackaging Drug Evidence Following CU Exams

Prior to returning evidence, any item(s) that require additional examinations (e.g., latent prints) will be separated from bulk drug evidence and repackaged in a new plastic evidence envelope, or an alternative package according to the LOM. A completed *FBI Laboratory Drug Evidence Label* (7-248) will be affixed to the package and the package will be properly sealed. The bulk drug evidence will be repackaged and properly sealed according to the LOM.

4 References

FBI Laboratory Quality Assurance Manual, Federal Bureau of Investigation, Laboratory Division, latest revision.

FBI Laboratory Operations Manual, Federal Bureau of Investigation, Laboratory Division, latest revision.

FBI Laboratory General Description of Evidence, Federal Bureau of Investigation, Laboratory Division, latest revision.

Forensic Advantage User Guide, Forensic Advantage® Systems, a division of The Computer Solution Company, Inc., latest revision.

Rev. #	Issue Date	History
10	09/13/19	Removed previous section 3.1 since hand-to-hand transfer of drug and valuable evidence is no longer required and rest of content was unnecessary, renumbered remaining sections. Revised to "Evidence Management Unit" in section 3.1. Changed "FBI Check-In-Notes" to FBI Laboratory Evidence Check-In Notes in section 3.2. Changed section 3.2.1 to allow the initial acknowledgement communication to be deemed sufficient for SUS cases. Edited section 3.4 to include the new FA bulky storage locations and to clarify the recording of internal transfers. Updated drug label name in section 3.5. Removed previous section 3.5.3 since drug and valuable evidence will no longer need to be stored in separate lockers.
11	07/15/20	Removed Fire Debris exclusion from Scope. Defined acronyms for TL, FA, and SUS in sections 3.1 and 3.2. Edited section 3.1 to applicable TL and Supervisor for ensuring case assignments (was UC and TL). Defined timeframe for sending combined communication in section 3.2.1. Minor grammatical edits made in section 3.3. Replaced "technicians and examiners" with "CU caseworking personnel" throughout. Moved Secondary Evidence to section 3.3.2 (was 3.2.2) and changed order of Appendices C and D.

Approval

Redacted - Signatures on File

Fire Debris Technical Leader: Date: 07/14/2020

General Chemistry Technical Leader: Date: 07/14/2020

Metallurgy Technical Leader: Date: 07/14/2020

Paints and Polymers Technical Leader: Date: 07/14/2020

Toxicology Technical Leader: Date: 07/14/2020

Chemistry Unit Chief: Date: 07/14/2020

QA Approval

Quality Manager: Date: 07/14/2020

Appendix A: *CU Evidence Check-In Sheet*

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Appendix B: *CU Abbreviation List*

ABS	acrylonitrile-butadiene-styrene co-polymer
BOPP	biaxially-oriented polypropylene
bpt	black plastic tape
c, c/	containing or with
cap	capsule
CD, c.d.	cross direction
CT	culture tube
gms	glass microscope slide
gws	glass well slide
GWt	gross weight
HDPE	high-density polyethylene
HS	heat-sealed
HSB	heat-sealed bag
HSE	heat-sealed envelope
HSEE	heat-sealed evidence envelope
LDPE	low-density polyethylene
LM	left message
MD, m.d.	machine direction
MMA	methyl methacrylate
MMY	make/model/year
MOPP	monoaxially-oriented polypropylene
N/C	no change
NC	negative control
NCB	negative control blood
NCS	negative control serum
ND, n.d.	not detected
N/R	no reaction
NR, n.r.	not reporting
OEM	original equipment manufacturer
PB	plastic bag
PBX	pill box
PC	positive control
PCB	positive control blood
PCH	positive control high
PCL	positive control low
PCS	positive control serum
PCU	positive control urine
PE	polyethylene
PP	polypropylene
PS	polystyrene
SBR	styrene butadiene rubber
SIS	styrene-isoprene co-polymer
tab	tablet
TM	test mix
TT	test tube
TWt	tare weight
VCF	vacuum collection filter
w/f	warp and fill
ZPB, ZPLB	Ziplock/zippered plastic bag

Appendix C: *CU Autosampler Verification Log*

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Appendix D: *CU Secondary Evidence Log*

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